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09/526,100	03/15/2000	Steven Sheppard	6019.3026	9168

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EXAMINER

CHUNG, JASON J

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2611

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19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/526,100

Applicant(s)

SHEPPARD ET AL.

Examiner

Jason J. Chung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Priority

1. The correction of inventorship is acknowledged.

Drawings

2. The drawings are objected to because the submitted figure 7 does not show the correction to the drawing and cannot be approved by the examiner. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 21, 30 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/443,744. Although the conflicting claims are not identical, they are not patentably

distinct from each other because the claims of the instant application are broader than the claims of copending application # 10/443,744.

Allowance of claims 1, 21, 30 would result in an unwarranted time-wise extension of the monopoly previously granted for the invention defined by claim 3 of 10/443,744, therefore, obviousness type double patenting is appropriate.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 9, 31, 33 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of copending Application No. 10/443,744. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are broader than the claims of copending application # 10/443,744.

Allowance of claims 9, 31, 33 would result in an unwarranted time-wise extension of the monopoly previously granted for the invention defined by claim 3 of 10/443,744, therefore, obviousness type double patenting is appropriate.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

4. Applicant's arguments filed 10/15/03 have been fully considered but they are not persuasive.

The applicant argues on page 5-page 6 under the heading of rejection under 35 U.S.C. 102 that Martinez does not disclose the optical receiver for detecting optical signal and generating a corresponding pulse train and a bias switch connected to the optical receiver, the bias switch turning on and off in response to the pulse train. The examiner respectfully disagrees with this assertion. An "AND gate" inherently receives logic highs (1's) and/or logic lows (0's). Martinez discloses the signals going into the AND gate are optical signals received via IR module 24 (optical receiver); the optical signals (0's and/or 1's) meets the limitation on pulse train; the oscillator 63 and crystal 61 produces an RF signal (column 9, lines 8-20). When one or all of the incoming pulses are 0's, then the AND gate does produces a logic low (0), which meets the limitation on the bias switch turning off in response to a pulse train. When all of the incoming pulses are 1's, then the AND gate produces a logic high (1), which meets the limitation on bias switch turning on in response to the pulse train. Therefore as disclosed in the previous action, Martinez discloses the IR module 24 (optical receiver) sends the optical signal to an AND gate 59 (bias switch) and the signal is sent to the modulator 65 and oscillator 63 (column 9, lines 8-20, figure 6); the combination of the modulator 65, oscillator 63, and crystal 61 reads on the claimed oscillator that modulates a signal to produce an RF signal. The AND gate receives pulse trains from the optical receiver 24 that are logic high "1's" and output the logic high to the modulator 65 (part of the claimed oscillator) and the modulator 65, oscillator 63, and crystal 61 responds to the logic high pulse train and convert the signal into an electrical signal, which meets the limitation on the bias switch and the oscillator coupled to the bias switch.

The applicant argues on page 6-page 7 under the heading of 103 rejections that Ehreth does not disclose or suggest directly receiving channel select commands at the residential

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gateway. The examiner respectfully disagrees with this assertion. Ehreth discloses receiving channel select commands and suggests receiving the channel select commands directly at the residential gateway by disclosing that the remote selector may be used in other suitable signal transmission media (column 4, lines 8-12). Hamlin discloses system controller 38 (residential gateway) that has a signal transceiver 40 coupled to it that interacts with a remote controller 42 capable of being carried anywhere around the house (column 3, lines 13-23); as previously disclosed, Ehreth discloses receiving channel select commands from a remote control and Hamlin discloses receiving remote control commands directly at the residential gateway, which meets the limitation on the channel select command received by a receiver directly within the residential gateway. Hamlin discloses the remote controller 42 can interact directly with the system controller 38 (residential gateway) (column 5, lines 30-45) and the systems controller has various TVs and VCRs connected to it (column 5, lines 17-29). Hamlin discloses the remote control can control the different devices in various locations of the house (column 5, lines 46-60). As previously disclosed, Ehreth suggests directly receiving commands at the gateway by disclosing that the remote selector may be used in other signal transmission media and Hamlin discloses the user can interact with the gateway from anywhere within the house making the user more mobile with the remote control and giving the system more versatility. Thus Ehreth does suggest combination of Ehreth and Hamlin.

The applicant argues on middle of page 7-middle of page 8 that Ehreth does not disclose or suggest that the video signals received by a residential gateway that correspond to channel select commands and a video processor for processing the received video signals to produce television signals or a video bus for transporting the received video signals to the video

processor. The examiner respectfully disagrees with this assertion. In order to clarify the examiner's position on the claimed subject matter, the examiner will specifically point out the areas in column 3, lines 11-34 of Ehreth where the limitations are met. As previously disclosed, Ehreth discloses a network interface module 32 (column 3, lines 11-34 and figure 1). Ehreth discloses the user can use a remote selector 70 to select channels (column 3, line 65-column 4, line 12). Ehreth discloses the channel selections are sent upstream to the communications controller 30 over network 90 and the communications controller coordinates to transmit information containing the selected video to the appropriate TV (column 4, lines 13-62). Ehreth discloses the network may provide all or only signals requested by communications controller 30 (column 3, lines 15-18). Ehreth discloses the broadband/narrowband network receives the data and the video signal for distribution to the television sets 100 through communications controller (residential gateway) and the communications controller sends all or only those video signals requested by the communications controller 30 (column 3, lines 10-34). Ehreth discloses the bi-directional arrow from the upstream signaling receiver 80 and the network interface 32 (figure 1). Thus, the channel select command is sent from the user's remote control 70 to the channel selector and signaling unit 50, upstream on network 90, to the communications controller 30, and the communications controller receives the appropriate signals from the broadband/narrowband network 40, which meets the limitation on video signals correspond to channel select commands. Ehreth discloses the network interface 32 can receive ATM cells carrying MPEG carrying video (column 3, lines 27-50). Ehreth discloses the network interface module 32 can convert ATM cells carrying MPEG encoded video into an analog format and the communications controller 30 includes a modulator for modulating the video signal into RF channels to the appropriate TV set

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(column 3, lines 27-50; figure 1), the conversion of digital video to analog and the modulation meets the limitation on a processor for processing the video signals to produce television signals. The definition of a bus is a conductor serving as a common connection in any high current application (Webster's New World Dictionary, Third College Edition 1988; page 188, definition #3). The network interface 32 disclosed by Ehreth inherently comprises a bus to transmit signals to the processor the converts digital to analog.

The applicant argues on the bottom of page 8-top of page 10 that Ehreth, Hamlin, nor Martin discloses the limitations of the previous claims. The examiner respectfully disagrees with this assertion. The examiner has given a motivation to combine Ehreth and Hamlin with Martin as stated below. The examiner has pointed out in the response given above how the limitations are met and therefore the claimed subject matter is unpatentable.

The applicant argues in the middle of page 10-middle of page 11 that the references of Ehreth, Hamlin, Martin, and Martinez fails to disclose the previous limitations. The examiner respectfully disagrees with this assertion. The examiner has given a motivation to combine Ehreth, Hamlin, and Martin with Martinez as stated below. The examiner has pointed out in the response given above how the limitations are met and therefore the claimed subject matter is unpatentable.

The applicant argues claims 18 and 37 on page 11 and states that Ehreth in view of Hamlin in further view of Martin in further view of Budow fails to meet the previous limitations. The examiner respectfully disagrees with this assertion. The examiner has given a motivation to combine Ehreth, Hamlin, and Martin with Budow as stated below. The examiner has pointed out

in the response given above how the limitations are met and therefore the claimed subject matter is unpatentable.

The applicant argues claims 19 and 38 on page 12 and states that Ehreth in view of Hamlin in further view of Martin in further view of Budow in further view of Flickinger fails to meet the previous limitations. The examiner respectfully disagrees with this assertion. The examiner has given a motivation to combine Ehreth, Hamlin, Martin, and Budow with Flickinger as stated below. The examiner has pointed out in the response given above how the limitations are met and therefore the claimed subject matter is unpatentable.

The applicant argues claim 40 on page 12 and states that Martinez fails to meet the limitations. The examiner respectfully disagrees with this assertion. The examiner has pointed out in the response given above how the limitations are met and therefore the claimed subject matter is unpatentable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 8-10, 16, 21, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth (US Patent # 6,286,142) in view of Hamlin (US Patent # 5,574,964).

Regarding claim 1, Ehreth discloses a communications controller 30 (residential gateway) the television set 100 that is by itself, which meets the limitation on one location and

television sets located in remote site 104, each television has a channel selector and signaling unit 50 associated with it (column 2, line 59-column 3, line 10 and figure 1), which meets the limitation on another location. The television by itself is close in proximity to the residential gateway, whereas the televisions in remote site 104 are remotely located.

Ehreth discloses the channel selector and signaling unit receives signals from remote selector 70 (remote control) (column 3, line 65-column 4, line 12).

Ehreth discloses the video signal is received from a telecommunications network (column 1, lines 44-60).

Ehreth discloses the communications controller 30 (residential gateway) receives the video signal from the drop cable (column 3, lines 11-34), which meets the limitation on transporting.

Ehreth discloses the communications controller 30 (residential gateway) has an upstream signaling receiver that receives channel select commands and transmits the selected video signal to the appropriate television set (column 3, lines 35-50 and column 4, lines 44-62), which meets the limitation on processing and transmitting.

Ehreth discloses the broadband/narrowband network receives the data and the video signal for distribution to the television sets 100 through communications controller (residential gateway) and the communications controller sends all or only those video signals requested by the communications controller 30 (column 3, lines 10-34). Ehreth discloses the bi-directional arrow from the upstream signaling receiver 80 and the network interface 32 (figure 1). Thus, the channel select command is sent from the user's remote control 70 to the channel selector and signaling unit 50, upstream on network 90, to the communications controller 30, and the

communications controller receives the appropriate signals from the broadband/narrowband network 40, which meets the limitation on video signals corresponding to channel select commands. Ehreth discloses receiving channel select commands and suggests receiving the channel select commands directly at the residential gateway by disclosing that the remote selector may be used in other suitable signal transmission media (column 4, lines 8-12). Ehreth fails to disclose the channel select command received directly by a receiver within the residential gateway. Hamlin discloses system controller 38 (residential gateway) that has a signal transceiver 40 coupled to it that interacts with a remote controller 42 capable of being carried anywhere around the house (column 3, lines 13-23); as previously disclosed, Ehreth discloses receiving channel select commands from a remote control and Hamlin discloses receiving remote control commands directly at the residential gateway, which meets the limitation on the channel select command received by a receiver directly within the residential gateway. Hamlin discloses the remote controller 42 can interact directly with the system controller 38 (residential gateway) (column 5, lines 30-45) and the systems controller has various TVs and VCRs connected to it (column 5, lines 17-29). Hamlin discloses the remote control can control the different devices in various locations of the house (column 5, lines 46-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth to receive the channel select command at a receiver directly within the residential gateway as taught by Hamlin in order to provide versatility and mobility while communicating with the gateway.

Regarding claims 2, Ehreth discloses a communications controller 30 (residential gateway) the television set 100 that is by itself, which meets the limitation on close in proximity and television sets located in remote site 104, which meets the limitation on televisions remotely

located; each television has a channel selector and signaling unit 50 associated with it (column 2, line 59-column 3, line 10 and figure 1). Hamlin discloses the keypad 70 on the remote control 42 can be used to transmit signals via electromagnetic radiation such as infrared (optical) to the signal transceiver 40 coupled to the system controller 38 (residential gateway) (column 6, lines 8-17).

Regarding claim 3, Ehreth discloses a communications controller 30 (residential gateway) the television set 100 that is by itself, which meets the limitation on close in proximity and television sets located in remote site 104, which meets the limitation on televisions remotely located; each television has a channel selector and signaling unit 50 associated with it (column 2, line 59-column 3, line 10 and figure 1). Ehreth discloses even though shown as a separate unit, the television set 100 and channel selector and signaling unit may be incorporated within or integrated into television set 100 (column 3, lines 2-3). Ehreth discloses the remote selector 70 can transmit infrared radiation to the channel selector and signaling unit 50 (column 3, line 65-column 4, line 7).

Regarding claim 8, as previously disclosed in the Office Action, Ehreth, Hamlin and Martin disclose the optical signals being infrared.

Regarding claim 9, the limitations in claim 9 have been met in claim 1 rejection. Ehreth discloses the additional limitation of a network interface module 32 (column 3, lines 11-34 and figure 1). Ehreth discloses the user can use a remote selector 70 to select channels (column 3, line 65-column 4, line 12). Ehreth discloses the channel selections are sent upstream to the communications controller 30 over network 90 and the communications controller coordinates to transmit information containing the selected video to the appropriate TV (column 4, lines 13-62).

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Ehreth discloses the network may provide all or only signals requested by communications controller 30 (column 3, lines 15-18), which meets the limitation on video signals correspond to the channel select commands. Ehreth discloses the network interface 32 can receive ATM cells carrying MPEG carrying video (column 3, lines 27-50). Ehreth discloses the network interface module 32 can convert ATM cells carrying MPEG encoded video into an analog format and the communications controller 30 includes a modulator for modulating the video signal into RF channels to the appropriate TV set (column 3, lines 27-50; figure 1), the conversion of digital video to analog and the modulation meets the limitation on a processor for processing the video signals to produce television signals. The definition of a bus is a conductor serving as a common connection in any high current application (Webster's New World Dictionary, Third College Edition 1988; page 188, definition #3). The network interface 32 disclosed by Ehreth inherently comprises a bus to transmit signals to the processor the converts digital to analog.

Regarding claim 10, the television by itself is close in proximity to the residential gateway, whereas the televisions in remote site 104 are remotely located. As previously disclosed, Hamlin discloses the receiver directly receiving channel selection is an optical receiver and transmits the signals to the system controller 38 (residential gateway) (column 6, lines 8-17).

Regarding claim 16, neither Ehreth nor Hamlin discloses a 1 KHz signal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Hamlin to have a 1 KHz signal.

Regarding claim 21, the limitations in claim 21 have been met in claims 1, 9 rejections.

Regarding claim 24, the limitations in claim 24 have been met in claim 2 rejection.

Regarding claim 25, the limitations in claim 25 have been met in claim 3 rejection.

6. Claims 4, 5, 7, 11, 14, 17, 20, 23, 26-28, 30-33, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth in view of Hamlin in view of Martin (US Patent # 5,500,691).

Regarding claim 4, Ehreth discloses the remote control 70 uses infrared radiation to send signals to the signaling unit 50 (optical receiver) (column 3, line 65-column 4, line 12). Additionally, Hamlin discloses an infrared signal is received at the signal transceiver and converted into an electromagnetic signal (column 6, lines 8-17), which meets the limitation on optical receivers. Hamlin discloses the signals from the remote are channel change commands (column 6, lines 29-45). Neither Ehreth nor Hamlin discloses the infrared signal being converted into a RF signal. Martin discloses an infrared signal received and converted into a RF signal where and the RF signal is sent to the television (column 3, lines 4-15), which meets the limitation on detecting, transmitting the pulse trains, and receiving. As stated in claim 1 rejection, Ehreth and Hamlin teach the signal sent from the remotely located television to the residential gateway, which meets the limitation on transmitting optical signals and transmitting the signals from the transmitter to the residential gateway. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Hamlin to convert the infrared signal into a RF signal as taught by Martin in order to avoid line of sight communication in IR communications.

Regarding claim 5, Ehreth discloses the upstream signaling receiver 80 (remote antennae module) may be located at any other suitable location (column 4, lines 44-51). Ehreth discloses the distribution network 90 (media) connects the remote sites 104 (remotely located televisions,

column 3, lines 7-10) to the upstream signaling receiver 80 (media interface device) (figure 1, column 3, lines 51-64).

Ehreth discloses the channel selection is sent from the signaling unit 50 (transmitter) to the upstream signaling receiver 80 (remote antennae module) (column 4, lines 24-43), which meets the limitation on receiving and extracting.

Ehreth discloses the communications controller 30 (residential gateway) communicates with the upstream signaling receiver (remote antennae module) in order to receive the signals and transmit them the user (column 3, lines 35-50). Martin discloses RF transmission.

Regarding claim 7, Ehreth discloses the upstream signaling receiver 80 (media interface device) may be located at any other suitable location (column 4, lines 44-51). Ehreth discloses the distribution network 90 (media) connects the remote sites 104 (remotely located televisions, column 3, lines 7-10) to the upstream signaling receiver 80 (media interface device) (figure 1, column 3, lines 51-64).

Ehreth discloses the channel selection is sent from the signaling unit 50 (transmitter) to the upstream signaling receiver 80 (media interface device) (column 4, lines 24-43), which meets the limitation on receiving and extracting.

Ehreth discloses the communications controller 30 (residential gateway) communicates with the upstream signaling receiver (media interface device) in order to receive the signals and transmit them the user (column 3, lines 35-50). Martin discloses RF transmission.

Regarding claim 11, the limitations in claim 11 have been met in claim 4 rejection.

Regarding claim 14, the limitations in claim 14 have been met in claim 5 rejection.

Regarding claim 17, the limitations in claim 17 have been met in claim 7 rejection.

Regarding claim 20, as disclosed in claim 7 rejection, Ehreth discloses the upstream signaling receiver 80 (media interface device) can be located in any other location or may be located within (column 4, lines 44-62), which meets the limitation on directly connected.

Regarding claim 23, the limitations in claim 23 have been met in claims 4-5 rejections.

Regarding claim 26, the limitations in claim 26 have been met in claim 4 rejection.

Regarding claim 27, the limitations in claim 27 have been met in claim 5 rejection.

Regarding claim 28, as disclosed by Ehreth, the upstream signaling receiver 80 (remote antennae module) can be located within the communications controller 30 (residential gateway) (column 44-51). The communications controller 30 is also a media interface device and the upstream signaling receiver 80 (remote antennae module) is located within.

Regarding claim 30, the limitations in claim 30 have been met in claims 1, 3, 4, 5 rejections. Ehreth discloses the additional limitation of a telecommunications network that is connected to the communication controller 30 (residential gateway) (column 1, lines 44-60).

Regarding claim 31, the limitations in claim 31 have been met in claims 9 and 11 rejections.

Regarding claim 32, the limitations in claim 32 have been met in claim 14 rejection.

Regarding claim 33, the limitations in claim 33 have been met in claims 31 and 32 rejections.

Regarding claim 36, the limitations in claim 36 have been met in claim 28 rejection.

7. Claims 6, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth in view of Hamlin in view of Martin.

Regarding claim 6, Ehreth discloses the video distribution network 90 is used for cable TV and that other types of transmission media may be used (column 3, lines 51-64). Neither Ehreth, Hamlin, nor Martin discloses the network media line being a coaxial cable. The examiner takes Official Notice that bi-directional being coaxial cables are notoriously well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Hamlin in further view of Martin to have the bi-directional line be a coaxial cable in order to use the well-known coaxial cable to plug into well-known standard coaxial cable outlets.

Regarding claim 15, the limitations in claim 15 have been met in claim 6 rejection.

8. Claim 12, 34, 42, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth in view of Hamlin in further view of Martin in further view of Martinez (US Patent # 5,812,184).

Regarding claims 12, as disclosed in claim 4 rejection, Ehreth discloses an optical receiver. As disclosed in claim 4 rejection, Martin discloses an optical to electrical conversion device.

Neither Ehreth, Hamlin, nor Martin discloses a bias switch turning on and off an oscillator and the oscillator producing a modulated RF signal and turning on and off in response to the switch. Martinez discloses the IR module 24 (optical receiver) sends the optical signal to an AND gate 59 (bias switch) and the signal is sent to the modulator 65 and oscillator 63 (column 9, lines 8-20, figure 6); the combination of the modulator 65, oscillator 63, and crystal 61 reads on the claimed oscillator that modulates a signal to produce an RF signal. The AND gate receives pulse trains from the optical receiver 24 that are logic high "1's" and output the

logic high to the modulator 65 (part of the claimed oscillator) and the modulator 65, oscillator 63, and crystal 61 responds to the logic high pulse train and convert the signal into an electrical signal, which meets the limitation on the bias switch and the oscillator coupled to the bias switch. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Hamlin in further view of Martin to have a bias switch driving an oscillator in response to pulse trains as taught by Martinez in order to synchronize the oscillator to the pulse trains.

Ehreth discloses the upstream signaling receiver 80 in the communications controller 30 (residential gateway) and there is upstream and downstream signals traveling between the channel selectors and signaling units 50 and the communications controller 30 (residential gateway) (column 3, lines 35-64). Neither Ehreth, Hamlin, nor Martin discloses a diplexer. Martinez discloses an isolator 47 (column 9, lines 8-20), which meets the limitation on a diplex filter. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Hamlin in further view of Martin to a diplexer as taught by Martinez in order to ensure the signals go in the proper direction.

Regarding claim 34, the limitations in claim 34 have been met in claim 12 rejection.

Regarding claim 42, the limitations in claim 42 have been met in claim 12 rejection; the limitations for claim 39 are discussed below.

Regarding claim 44, the limitations in claim 44 have been met in claim 12 rejection.

9. Claims 13, 35, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth in view of Hamlin in further view of Martin in further view of Martinez.

Regarding claim 13, Martinez suggests an attenuator with the disclosure of an isolator 47 (column 9, lines 8-20); an isolator is a form of an attenuator. Neither Ehreth, Hamlin, Martin, nor Martinez discloses an attenuator between the diplexer filter and the oscillator. The examiner takes Official Notice that attenuators are notoriously well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Hamlin in view of Martin in further view of Martinez to have a attenuator between the oscillator and the diplexer filter in order to limit the signal coming into the oscillator to prevent the diplexer filter from injecting too large of a signal to the residential gateway.

Regarding claim 35, the limitations in claim 35 have been met in claim 13 rejection.

Regarding claim 44, the limitations in claim 44 have been met in claim 13 rejection.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth in view of Hamlin in view of Martin.

Regarding claim 16, the remote antennae module disclosed in the reference of Ehreth inherently extracts channel select commands at a frequency, however, the exact value of the frequency is undisclosed by Ehreth, Hamlin, and Martin. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Hamlin in further view of Martin to have the channel select commands from the RF signals as 1 KHz signal or any other frequency in order to comply with different system configurations.

11. Claim 18, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth in view of Hamlin in further view of Martin in further view of Budow (US Patent # 5,521,631).

Regarding claim 18, Ehreth discloses the upstream signaling receiver 80 in the communications controller 30 (residential gateway) and there is upstream and downstream

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signals traveling between the channel selectors and signaling units 50 and the communications controller 30 (residential gateway) (column 3, lines 35-64). Neither Ehreth, Hamlin, nor Martin discloses a diplexer. Budow discloses a diplexer located within a room terminal 15 (residential gateway) (column 14, lines 34-43). Budow discloses a diplexer 405 is used to pass the television signals (other signals) directly to the TV (column 14, lines 44-50, figure 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Hamlin in further view of Martin to have a diplexer in the residential gateway as taught by Budow in order to pass the television signals directly to the TV.

Regarding claim 37, the limitations in claim 37 have been met in claim 18 rejection.

12. Claim 19, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth in view of Hamlin in further view of Martin in further view of Budow in further view of Flickinger (US Patent # 5,901,340).

Regarding claim 19, neither Ehreth, Hamlin, Martin, nor Budow discloses a balun. Flickinger discloses a wall outlet (residential gateway) comprising of a balun that impedance matches (column 3, lines 7-20). Flickinger discloses in addition to receiving video signals from the VCR 24, the classroom receives video signals from an external source (column 3, lines 38-49). Flickinger discloses that coaxial cables or fiber optic cables or baluns for twisted wire pair can be used interchangeably (column 3, lines 20-37); the selected (subset) video signals going into the video wall outlet (residential gateway) are impedance matched by the balun. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Hamlin in further view of Martin in further view of Budow to have a balun as taught by Flickinger in order to impedance match the signals.

Regarding claim 38, the limitations in claim 38 have been met in claim 19 rejection.

13. Claim 22, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth in view of Hamlin.

Regarding claim 22, as disclosed in claim 1 rejection, Ehreth discloses the television outside of remote site 104 meets the limitation on close in proximity. As previously disclosed, Ehreth discloses the television is connected to communication controller 30 (residential gateway) via a video system distribution network 90, which may be various types of media (column 3, lines 51-60). Neither Ehreth nor Hamlin discloses the media being S-video cables. The examiner takes Official Notice that media such as S-video cables are notoriously well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Hamlin to have S-video cables in order to provide better picture quality.

Regarding claim 29, as disclosed in claim 1 rejection, Ehreth discloses the television is connected to communication controller 30 (residential gateway) via a video system distribution network 90, which may be various types of media (column 3, lines 51-60). Neither Ehreth nor Hamlin discloses the media being S-video cables. The examiner takes Official Notice that media such as S-video cables are notoriously well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Hamlin to have S-video cables in order to provide better picture quality.

14. Claims 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martinez.

Regarding claim 40, the examiner taking Official Notice in claim 13 rejections has met the limitations in claim 40.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claims 39, 41, 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Martinez.

Regarding claim 39, the limitations in claim 39 have been met by Martinez in claim 12 rejection.

Regarding claim 41, Martinez discloses the TRM 22 (optical conversion device, figures 6 & 4) is connected to a TV via converter box 18 and the user can use remote control 20 (column 8, lines 21-41); the receiver 49 of the TRM 22 detects the channel in which the receiver is tuned (column 8, lines 42-64), which meets the limitation on controlling the channel selection with the remote control.

Regarding claim 43, as disclosed in claim 12 rejection, Martinez discloses (figure 7, column 8, lines 22-41), the stand-alone response module 22 is placed on top of TV and uses a coaxial cable.

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason J. Chung whose telephone number is (703) 305-7362. The examiner can normally be reached on M-F, 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew I. Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

JJC



VIVEK SRIVASTAVA
PRIMARY EXAMINER